

STAFF STUDY
ON THE
DESIGN AND PRESENTATIONS CENTER,
PRINTING AND PHOTOGRAPHY DIVISION, OL

STAT

April 1983

1.0 Purpose

The purpose of this study is to determine if the present organizational structure of the Design & Presentations Center (D&PC), P&PD, provides optimum productivity, responsiveness, and quality of products produced.

2.0 Statement of the Problem

The problem involves several interrelated issues encompassing the following considerations:

- A. A need to prioritize use of P&PD's Headquarters space in the GJ Corridor.
- B. A need for additional space to accomodate new equipment required to satisfy increasing production requirements, some of which will result from the impending VM-Dicomed interface, while retaining a colocated COM/D&PC structure.
- C. A survey of D&PC's three primary graphic design activities - - photographic-type products; exhibits; and publications support--in relation to possible relocation of the latter activity to the Planning and Scheduling Staff (PSS) in the Main Printing Plant (MPP).

3.0 Facts Bearing on the Problem

Space is currently inadequate to satisfy the desired requirements of P&PD's COM and D&PC operations. Increasing requirements, personnel resources, and equipment utilization are also factors influencing a solution that will be mutually satisfying to all. The possible relocation of a D&PC designer to the MPP presents problems concerning personnel, administration, service to an established customer base, and logic.

4.0 Discussion

4.1 Organization

The D&PC consists of eight (8) full-time personnel ranging in grade from GS-07 to GS-13. Seven of the personnel are classified as Visual Information Specialists, the eighth is an Exhibits Specialist. The D&PC is administratively and organizationally responsible to the Chief, Photography Branch, (see Figure 1).

Printing and Photography Division
OFFICE OF LOGISTICS

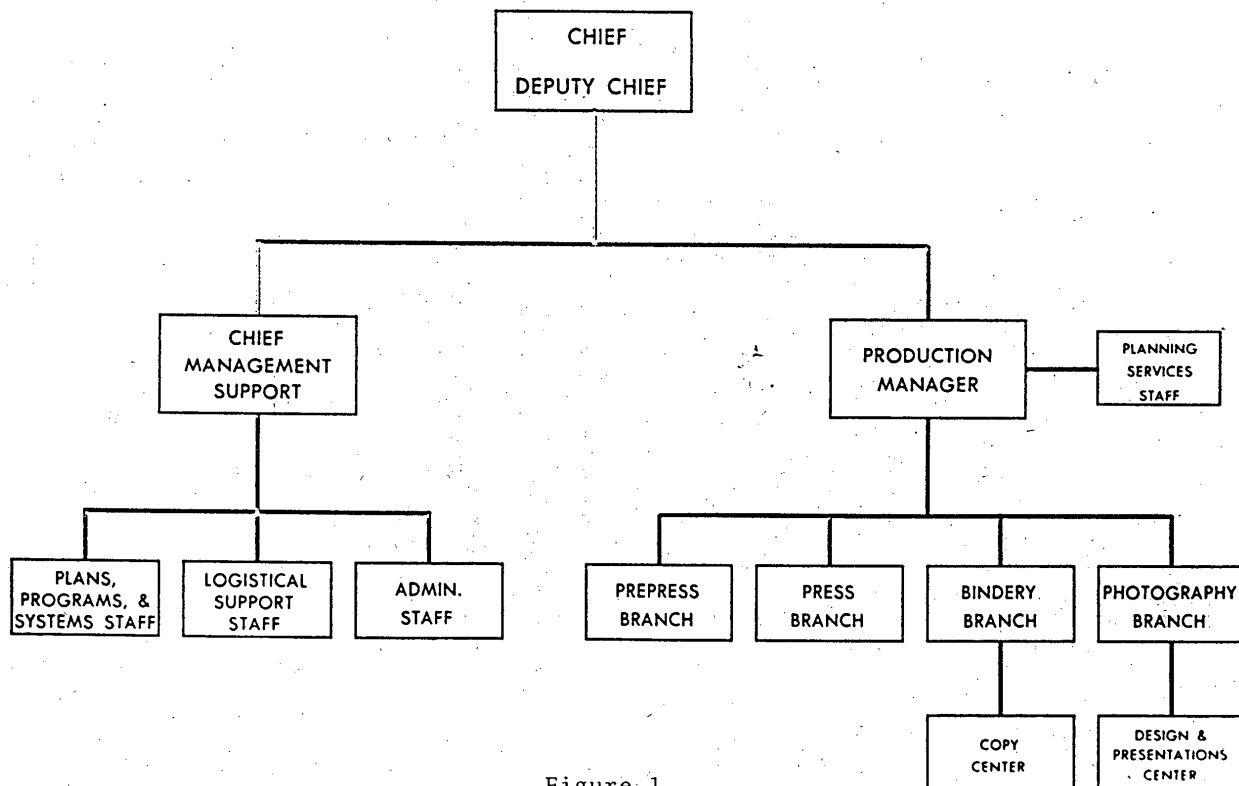


Figure 1.

4.2 Product Activity

The D&PC produces many varied graphic arts products for both walk-in customers and P&PD main plant referral customers. Most of D&PC's work is from the walk-in customers in the Headquarters Building. For the purpose of this study, only three graphic design activities are to be addressed. They are:

- a. Graphic design activity that results in photographic-type products,
- b. Graphic design activity for exhibits, and
- c. Graphic design activity that relates to publications.

The latter category is of prime concern to the tasking statement upon which this study is based. In support of this, a tabulation of D&PC records for the past three fiscal years and by the three subject categories referenced above are shown in Figure 2 below. The figures in parentheses represent the number of jobs and relative percentage of jobs which were directed to D&PC from the MPP, according to the records furnished by the Chief, DP&C for this study.

Figure 2. D&PC Three Year Statistics

FISCAL YEAR	NO. OF JOBS BY PRODUCT TYPE			FY TOTALS
	PHOTOGRAPHIC	EXHIBITS	PUBLICATIONS	
1980	31-(1) (3%)	16-(1) (6%)	36-(3) (8%)	83-(5) (6%)
1981	84-(0) (0%)	8-(0) (0%)	42-(3) (7%)	134-(3) (2%)
1982	115-(14) (12%)	8-(0) (0%)	33-(6) (18%)	156-(20) (13%)
3-YR TOTAL	230-(15) (7%)	32-(1) (3%)	111-(12) (11%)	373-(28) (8%)

As can be seen from Figure 2, photographic-type products have increased 271%, exhibits have decreased 50%, and publications have decreased 8% in FY-1982 compared to FY-1980. Publications requirements for the three fiscal years is relatively stable. A total of 111 publications jobs have been recorded from FY-1980 through FY-1982; yet only 12 of them, or 11% of the total, have been referred from the MPP. This would seem to indicate that customers already know where to go when needing publications design services, and that any change in the location of that activity would be an inconvenience. This viewpoint was

reinforced in discussions with PSS in which it was stated that almost all P&PD customers are familiar with printing and production procedures, have their own personnel and coordinate reproduction requirements, and consequently require little design support.

4.3 Throughput Time

As specifically requested in the tasking statement, an analysis of the throughput times for each product for the past three fiscal years is provided in Figure 3. The basis of this data is taken from the records furnished by the Chief, D&PC, and is available in detail in the Systems Staff if necessary. In those cases where Date In information was provided, it has been dropped. The numbers represent the total number of days calculated from the Date Started to Date Completed information provided. No adjustment has been made for weekends or holidays. Compared to Figure 2, the total number of jobs has been adjusted in a few cases because complete information was not available.

4.4 Miscellaneous

During the course of researching information for this study, the production personnel in the MPP indicated that they have quite a few problems with work submitted by D&PC. There seems to be a lack of knowledge regarding the reproduction processes. This is also a problem area with many of P&PDs customers who are responsible for publications. It should be the responsibility of the designer to understand what happens with his/her product in the printing process. This should be especially true of P&PDs own graphic designers, and can be accomplished through rotational assignments of graphics personnel to the MPP/PSS.

4.5 Relocation Options

- 4.5.1 The subject of physically relocating a D&PC artist/illustrator/designer to the MPP, specifically the PSS, is certainly possible but administratively questionable. According to discussions with the Production Manager, sufficient equipment and space is, or could be made available in PSS. The designer position might also be a rotating slot rather than a permanent assignment. In this case, it must be assumed that the intent is to maintain D&PC control of the person and function. While this is not impossible, it doesn't make the D&PC supervisory responsibility any easier, and would seem to open the door to the possibility of a lot of speculative (out of sight, out of mind) and/or word-of-mouth (PSS

Figure 3. Throughput Times by FY and Major Products

FY	Product	No. of Jobs	Total No. of Days	Average No. of Days	Shortest Throughput	Longest Throughput
1980	Photographic	29*	200	7	1	22
	Publications	36	316	9	1	28
	Exhibits/Displays	16	162	10	1	30
1981	Photographic	84	994	12	1	30
	Publications	42	522	12	1	81
	Exhibits/Displays	8	76	10	2	28
1982	Photographic	114**	1397	12	1	56
	Publications	33	196	6	1	16
	Exhibits/Displays	8	78	10	1	27

* 2 jobs no information available
 ** 1 job no information available

observation) performance appraisal. On the other hand, transfer of the publications design responsibility to the PSS opens the door to questions such as: Who in PSS is qualified to judge the capabilities of the designer except strictly as a production person? Why hasn't PSS availed itself of the graphics/design talents of one of its own planners for these many years? Won't such a move be considered a de-centralization of D&PC services? Will the designer retain the Visual Information Specialist classification or become a Printing Production Specialist? At what grade? Against what slot?

- 4.5.2 But the issue also has to be addressed in terms of customer convenience. Publications design usually involves a lot of communication and liaison between the customer and the designer. Since the D&PC-supplied records substantiate the contention that very little publications design activity comes from MPP referrals as opposed to a Headquarters-oriented customer base, any transfer of the activity to the PSS would seem to be an inconvenience and disservice.
- 4.5.3 It has been suggested that a designer in PSS would be more accessible to MPP typesetting capabilities and would be in a better position to monitor the ongoing production of publication design jobs. Yet, according to personnel from D&PC, the typesetting support from ETECS in the Headquarters building is very good, and "just around the corner." The idea of monitoring a job through the production process has some validity but runs contrary to long-standing accepted procedures (except in special cases), and presents the possibility of questioning the expertise of skilled journeymen.
- 4.5.4 Another option might be to locate a publications designer in the Prepress Branch, specifically the combined Composing and Layout areas. This would provide the designer with first-hand accessibility to MPP typesetting and proofreading services, as well as convenience to monitoring printing production and use of Photography Branch services as required. However, this option still creates the situation of inconvenience to Headquarters-based customer sources who are the primary requestors for publications graphic design activity, and the creation of a situation which could lead to a lot of resentment and challenge.

4.5.5 The Prepress Branch location gives rise to the possibility of a publications designer assuming responsibility for the design (and eventual standardization?) of all forms via Camex control. This could be a secondary task, particularly in times of slackened publications design activity. Forms standardization refers to two phases; (1) the conversion of existing forms negatives to Camex Floppy Discs or whatever other medium is used, and (2) the establishment of graphic standards for type sizes, styles, line weights, spacing, etc.

4.5.6 Relocation of one D&PC designer to the MPP would free up 80-90 sq.ft. of space in GH-4008, based on current designer workstations which vary from 9'x9' to 9'x10' in size. This space would be sufficient for another computer graphics terminal workstation. Presumably, the day is coming when every designer will have his/her own terminal, or that the D&PC will be divided into two major workareas such as a multi-terminal computer-assisted design area, and a more traditional manual-design area with individual workspaces much like D&PC's current designer workstations. It therefore seems that the relocation of one designer would have little effect on the overall space situation within D&PC.

5.0 Personnel Resources

5.1 According to the Chief, D&PC, three D&PC illustrators are fully qualified at working on the computer graphics terminals, two are somewhat familiar with the equipment, and the other two have just started training on the terminals. Since computer graphics production is increasing at a substantial pace, it is obvious that this type of skill is going to be required of all D&PC personnel. If not, then perhaps specific job functions and titles need to be re-defined and re-evaluated if the computer graphics are going to continue to be done by only some of the workforce.

5.2 In the area of manual skills, there is a versatile mix of individual talents to cover most of the requirements levied upon D&PC. Each illustrator has his/her strongpoint (ie, cartooning, lettering, A-V storyboard, etc.) and is usually called upon to perform tasks which will make the most of that particular skill. However, both areas of expertise, computer and manual, are dictated by time restraints. This results in a lack of adequate training time to achieve computer proficiency, or for flexibility in

assigning jobs in order to gain experience at other tasks.

- 5.3 Many segments of the 'graphics' profession seem to thrive on the 'I needed it yesterday' syndrome, and D&PC is no exception. This leads to management problems regarding conflicting deadlines, and juggling priorities. It also leads to disruptive thinking and planning when performing in a creative mode. Discussion with D&PC personnel revealed that customers oftentimes falsify deadlines for their own convenience, or that political considerations dictate the immediacy of the D&PC response, leading to some confusion and resentment for shifting priorities. This seems to be supported by the fact that D&PC records do not reflect an accurate measure of time spent on individual projects, but rather reflect only the date in/date out timeframe. It would seem that misconceptions of project completion time could be avoided through a more careful auditing of personnel resources, and provide better management support in identifying Division resources allocations to customer requirements.

6.0 Monthly Production Statistics

- 6.1 The Monthly Production Report (MPR) contains 23 columns of statistical reporting for D&PC (see Attachment 1). A definition (sic) of each product reported is contained in Attachment 2. During the first half of the Fiscal Year, it is interesting to note that the months of October 1982 and March 1983 have been statistically impressive in comparison with the other four months. According to D&PC sources, this is not a change in accounting methods, but reflects a heavy workload and the completion of some large projects. A summation of the MPR statistics for the first six months shows that D&PC produced the following products:

FIGURE 3. SUMMARY OF D&PC 6-MONTH PRODUCTION

Product Category	No. of Products	Mo. Avg.	% of Total Products
General artwork	280	47	6.49
Special art	74	12	1.71
In-house vugraphs	72	12	1.67
Original slides	2939	490	68.13
Publications	823	137	19.08
Multi-image productions	85	14	1.97
Displays & exhibits	41	7	0.95
Total	4314	719	100.00

- 6.2 These products were produced using 6,373 available manhours, including 34 hours of overtime. Supervisory time of 40 hours per week is not included in the reported available manhours. A little statistical extrapolation assumes the following:

7 artists x 40 hrs/wk = 280 available hrs/wk
 280 hrs/wk x 26 wks = 7280 available hrs/wk
 7280 available hrs
-6373 reported available hours
 =907 hrs for leave, training, etc.
 (12% of available hours)

One can then further assume:

<u>Product Category</u>	<u>% of Workload</u>	<u>No. of Available Hrs (6373)</u>
General Artwork	6.49	413.61
Special art	1.71	108.98
In-house VGs	1.67	106.43
Original Slides	68.13	4341.92
Publications	19.08	1215.97
Multi-image prods	1.97	125.55
Designs & exhibits	0.95	60.54
	<u>100.00</u>	<u>6373.00</u>

- 6.3 What does this prove? Perhaps nothing, because there are no available records to show the total number of hours charged to each project. And, in all fairness, there is also no direct correlation between the percent of the workload and/or number of products versus a similar percentage/number of available hours. It is merely an assumption for the purpose of establishing an "averages" comparison. It is interesting to note however, that the monthly average of 490 original slides represents 68% of the average monthly number of products (719). And that the monthly average of 137 publications products represents 19% of the total monthly average number of products. Together, these two items account for 627 products and 87% of the monthly averages, leaving 92 products and 13% to account for the complete monthly totals (719 and 100%). In terms of how many people are directly responsible for these product mixes, there is no firm answer. It is generally assumed that three people are bearing the burden of slide production, and that one or two are producing most of the publications-related products.

- 6.4 Regarding the content of the 23 columns of information reported, it is assumed that this is the type of information that management requested and will continue to want in the future. But is it? Some of

the definitions of column headings seem somewhat repetitious, or at least closely akin to each other. Perhaps some thought should be given to simplifying the product accountability by reducing the number of categories. For example, Original Slides continues to be the most impressive monthly statistic, yet Prints from Slides and Vugraphs from Slides are also reported by D&PC although they are in fact a Color Lab function. For management information and planning purposes, it seems that a means of correlating the manhours expended to products produced would be a valuable tool.

7.0 Space Requirements

7.1 Overall Situation

P&PD has four operational components located in the GH corridor areas of the Headquarters Building. They are:

<u>Component</u>	<u>Room No.</u>	<u>Administrative Responsibility</u>	<u>Sq. Ft.</u>
Bindery & Reproduction Center (B&RC)	GJ-56	Bindery Branch	1560
ETECS	GJ-56	Prepress Branch	1100
COM Center	GJ-4004	Photography Branch	870
Design & Presentation Center (D&PC)	GJ-4008	Photography Branch	1695
		Total:	5225

All of the areas suffer from space limitations to some degree. Changing requirements and new equipment acquisitions are also impacting upon the productive efficiency, morale, and safety of the components. In addition, it has been established that there is a need to retain the COM Center and the D&PC next to each other. What all this amounts to is a continuing problem with available space and potential space; and no easy solution(s). A possible solution lies in the renovation of Room GJ-50. This area presently houses the air handler equipment which services GJ-56, and GJ-4004, and GJ-4008. The ETECS areas is independently served by a stand-alone air handler unit. GJ-50 represents 400 sq. ft. of potentially usable space for productive expansion. This may not offer a total solution to P&PD's space concerns, but at least it is a potential start.

7.2 Specific Problem Areas

- 7.2.1 Bindery and Reproduction Center: The B&RC is probably the best off in terms of total square footage available and the personnel/equipment mix. The overall configuration of the area leaves something to be desired re workflow, administration, and customer convenience, and could no doubt be improved with more space, or the relocation of some equipment to the MPP.
- 7.2.2 ETECS: The ETECS area is located within the GJ-56 space, but is an entirely separate work function and administrative responsibility. ETECS does not have a separate room number and does not rely upon the GJ-50 air handler distribution. The ETECS space is basically an environmentally-controlled computer area, with a stand-alone air handler unit circulating through the raised floor. The area is crowded and noisy. Some relief from the constant 'hum' of the computer equipment is expected from the installation of acoustical panels to enclose the equipment. This should be accomplished in June or July 1983. Perhaps some small space benefit could be achieved by closing the entrance to ETECS through GJ-56, and have all personnel enter directly through the ETECS 'back door' which is directly off the GJ corridor (near the Self Study entrance).
- 7.2.3 COM Center: This area is undoubtedly the worst of P&PDs space problems. The component is crowded, noisy, and subject to frequent temperature and humidity variations which impact upon the type of equipment operating in this space. It really should be an environmentally-controlled area, with sufficient space for proper air circulation and vendor maintenance accessibility. The COM Center workload has grown substantially over the years, and the continuing space and environmental problems affect productivity, quality, morale, and safety.
- 7.2.4 Design and Presentations Center: The recent expansion of the COM Center into 130 sq. ft. of D&PC space has only created new problems for the artist's area. Changing requirements and equipment acquisition in the form of computer graphics workstations have really created a crowded situation in D&PC, and, to the best of my knowledge, all of this equipment except one current rental piece will remain. One possible option might be to relocate the color Xerox copier to B&RC. Another option, which the D&PC Quality Circle Team has identified as a future project, is the acquisition of modular workstations. The relocation of one designer to the

MPP would only free up approximately 90 sq.ft. of space, but there are already several options of what to do with the space should it become available.

- 7.2.5 GJ-50: This area represents the key to at least a partial solution to some of P&PD's Headquarters space problems. The area is presently being used by B&RC, COM, and D&PC for supply storage. More effective use of the space is hindered by the bulky overhead configuration of the air handler equipment. In a recent memo response by the Headquarters Engineering Branch re the question of removing the air handler equipment (see Attachment 3), it was stated that the equipment could indeed be removed, but individual air handler units would have to be installed in the B&RC, COM, and D&PC areas. In addition, the existing ductwork will not work with individual air handler units and would have to be removed and replaced with new ductwork. Renovation of the GJ-50 area appears to be the best option presently available to P&PD. Another option is the acquisition of the Self Study Center. This area represents a sizeable amount of space which could provide ample solution to the space issue; however, it is highly doubtful that this area could be acquired. Consequently, this option will not be considered.

8.0 Conclusions

- 8.1 In an effort to reach a fair and logical conclusion re the merit of relocating the publication design activity from D&PC to the Main Printing Plant, the following pros and cons are offered:

Advantages

- a. The function will be part of the PSS.
- b. The function will be closer to MPP services.
- c. It will be easier to monitor jobs through production.
- d. PSS will be able to provide design services as part of the planning procedure.
- e. Improved communications and coordination of due dates through coordination with the Production Manager and Branch Chiefs.

Disadvantages

- a. There is nothing to be gained.
- b. It is not a PSS function.
- c. MPP referrals don't justify it.
- d. D&PC statistics for FY 80 thru 82 don't justify it.

- e. It would be an inconvenience to an established customer base.
- f. Customers already know where to go for design services.
- g. It would be a decentralization of D&PC services.
- h. It would pose administrative difficulty.
- i. It would disrupt workload distribution among D&PC designers. (Designers in each location - MPP and P&PD - doing publications design as workloads dictate.)
- j. Lack of PSS space.
- k. It would disrupt central record keeping and production control of D&PC responsibility.
- l. It might spark resentment among production workers re close monitoring of the job.
- m. Artists function better in an environment where they can share:
 - . Ideas (creative atmosphere, exchange)
 - . Reference material (morgue)
 - . Equipment technology (computer graphics)
 - . Production services (air brushing, mounting)
 - . Skills (cartooning, lettering)
- n. All P&PD services are already available to D&PC. (FY82 reorganization allowed "for the more efficient utilization of the Division's human resources," and "the structure of the organization to more closely align with the current technologies in existence throughout the Division."

9.0 Recommendations

9.1 Based on the fact that the conclusions of this study do not support the concept of transferring the graphic design responsibility of the D&PC to the PSS via either physical relocation and/or personnel/administrative transfer, there are only a few recommendations.

9.2 Specifically, it is recommended that:

1. D&PC personnel continue to participate in a rotational assignment to the PSS for a period of at least 60 days per designer. (It should be the responsibility of the designer to know reproduction processes. This is an area that seems to be lacking in many of P&PD's customers who are responsible for publications. However, there should be no excuse for P&PD's own graphics design personnel not knowing how to properly prepare artwork for reproduction.)

2. P&PD seriously consider options re Room GJ-50 and proceed to acquire that space for COM expansion. Depending on COM's equipment and personnel


configuration, part of the GJ-50 space should be considered for D&PCs needs.

3. P&PD management review the type of information being reported in the MPR for its creditability, uniformity, definition, usefulness, and purpose.

4. Closer supervision be given to the preparation of graphics material for lithographic reproduction. (During the research for this study, production personnel in the MPP indicated that they have quite a few problems with work submitted by D&PC.)

5. The D&PC implement stricter project accountability records re actual time spent on each project rather than just the date in/date out method.

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Plans, Programs, and Systems Staff
Printing and Photography Division/OL

PHOTOGRAPHY—DESIGN AND PRESENTATIONS CENTER

MONTHLY AVERAGE	GENERAL ARTWORK							SPECIAL ART *	IN-HOUSE VUGRAPHS	ELECTRONIC DESIGN & LAYOUTS		
	ILLUSTRATIONS	CHARTS	SIGNS	BOARD ART			TOTAL			ORIGINAL SLIDES	VUGRAPHS FROM SLIDES	PRINTS FROM SLIDES
				POSTERS	SLIDES	VUGRAPHS						
1978	/	/	/	/	/	/	/	/	/	/	/	/
1979	/	/	/	/	/	/	/	/	/	/	/	/
1980	/	/	/	/	/	/	/	/	/	/	/	/
1981	2	21	85	4	1	5	49	22	3	124	12	135
1982	3	23	13	5	6	4	55	16	14	410	25	379
October	29	15	54	21	0	0	119	16	30	465	98	0
November	1	8	13	1	0	6	24	12	0	499	137	636
December	3	2	3	6	0	0	14	9	3	607	52	659
January	1	6	3	2	0	3	15	11	23	392	3	395
February	1	5	1	3	4	0	14	12	8	305	15	330
March	1	80	9	4	0	0	94	14	8	671	29	700
Total/ Mo. Avg.	36/6	116/19	83/14	37/6	4/.66	9/1.5	280/47	74/12	72/12	2939/490	334/56	2720/453

PHOTOGRAPHY—DESIGN AND PRESENTATIONS CENTER

MONTHLY AVERAGE	PUBLICATIONS			MULTI-IMAGE PRODUCTIONS			DISPLAYS & EXHIBITS			AVAILABLE MAN-HOURS	OVERTIME EXTENDED
	DESIGNS	LAYOUTS	TOTAL	DESIGNS	LAYOUTS	TOTAL	DESIGN & PRODUCTION	OUTSIDE PRODUCTION MONITORING	TOTAL		
1978	/	/	/	/	/	/	/	/	/	/	/
1979	/	/	/	/	/	/	/	/	/	/	/
1980	/	/	/	/	/	/	/	/	/	/	/
1981	5	8	13	1	1	2	2	1	2	775	5
1982	7	20	27	7	88	95	7	5	12	854	84
October	108	129	237	0	0	0	22	0	22	1,060	21
November	48	10	58	0	0	0	7	0	7	971	13
December	15	68	83	0	0	0	1	0	1	1,033	0
January	5	51	56	0	0	0	3	0	3	1,082	0
February	3	40	43	1	0	1	5	0	5	993	0
March	126	220	346	1	83	84	3	0	3	1,200	0
Total/ Mo. Average	305/51	518/86	823/137	2/.33	83/14	85/14	41/7	0/0	41/7	6339/1056	34/6
										6373 (Combined Total)	

M/S

~~ALL~~ - D&PC info for each item -
 (for each job only) ~~ALL~~

only
 board*

- * 1- illustrations - artwork drawn on paper or board with color ~~or~~ or shading completed. More than line art only.
- * 2- charts - any pie, bar, word, line, or information applied to a board or paper used in reproduction for printing or photography.
- * 3- Signs - text applied to board for sign copy or big printing.
- * 4- Posters - (board art) final art made for printing or photography copies of such.
- * 5- Slides (board art) artwork created for 35mm camera copies on film.
NO COMPUTER.
- * 6- Kugraphs (board art) artwork created for 8x10 camera copies on film.
NO COMPUTER.
- * 7- SPECIAL ART - ^{artwork or} Designs that fit into one of a kind - like
 - LOGOS
 - Book covers
 - Presentation for retirees, etc.
 - Certificates
 - Photo retouch - taking out marks

7 Special art - cont'd -

- overlay made for camera separation - that support a PPD request for a rerun on a printing job.
 - INSIG-NIA artwork for patches (DPD)
 - ? • Decal artwork for outside vendors - ?
 - Photo changes - removing people - adding in chairs - removing windows, adding in people - moving people together; etc. (Final photo is then copied for color or B+W print.)
 - Cartoons, with captions or comic strips.
 - Photo enhancement
outlining or making object appear more visible in photo for copies to be made
 - Cut and Paste art for camera reproduction.
 - Photo montage ~~and~~ construction
 - Photo - faces; add glasses or beards or hats, etc.
- Splicing as photo changes*
- Note: just some things we have done - we never know what will be asked to do or make.

each product counted
slides - vugraphs

- o 8- IN HOUSE VUGRAPHS - (No. of vugraphs) ^(NOT Jobs)
any artwork copied into
vugraphs in DVC on ITEX camera
or XEROX 6500. NOT IN PHOTO BRANCH
- o 9- Electronic Slides - D38 - Slides counted
~~as slides~~ made on computer.
- o 10 Electronic vugraphs - ^{counted} vugraphs made
on computer - (slides copied in Photo
Branch into vugraphs)
computer slides made into vugraphs

Publications

- o 11 Designs - how many designs were
made for publication mockups
for approvals.
- o 12 Layouts - designed for approval
or makeup for layout, printing
of publication. Final artwork.

Multi Image Production by the job

- 13 Designs - ideas on a subject in
written form - by the job -
- o 14 Layouts - boardart used for all
slides - count each boardart made
for slides -

Display + Exhibits

15 Design + Production

any job made into Display
or exhibit - a design or final product.
each as a job.

16 Outside Production Monitoring -

each job outside - when
monitored by D+PC employees
how many times.

STAT



3/3/83

23 MAR 1983

MEMORANDUM FOR: Plans, Programs & Systems Staff, P&PD/OL

ATTENTION:

FROM:

Chief, Headquarters Engineering Branch,
RECD/OLSUBJECT: Renovation Considerations to Headquarters
Room GJ50REFERENCE: Memo to C/HEB from , dtd 10 Mar 83,
Same Subj.

1. In response to the referent memo, members of my staff conducted a preliminary study of the heating, ventilating and air conditioning (HVAC) systems in the GJ56 area. As you are aware, the air handling unit (AHU) located in Room GJ50 was installed in 1976 to accommodate the renovation of the GJ56 area as a pressroom. The AHU remained in place when the area was subsequently renovated and the press equipment re-located.


2. The AHU located in GJ50 has a capacity of approximately 20 tons and occupies approximately 185 square feet of space. The overall heat load for the COM Center, D&PC Center, and B&R Center is approximately 20 tons. This is based on maximum equipment heat loads of 9 tons for the COM Center and 5 tons for the B&R Center area (information provided by your staff), and an estimated 3-ton equipment load for the D&PC Center.

3. Should your expansion plans require it and assuming heat loads as described in Paragraph 2, the AHU located in GJ50 can be removed; however, alternate means of air conditioning the areas would have to be provided. One alternative would be to install a separate AHU for the COM Center and possibly the B&R Center and place the D&PC Center on building system AC-19. Since there is no raised flooring in these areas, in order to provide proper air distribution installation of any new HVAC system would require extensive renovation of the ductwork located above the suspended ceiling. Each separate AHU installed would require up to 50 square feet of floor space plus maintenance access of at least three feet around the unit front and sides. AHU proximity to existing floor drains is also important to preclude the undesirable use of sump pumps for the AHU condensate.

OL 13221-83

Attachment 3-1

SUBJECT: Renovation Considerations to Headquarters Room GJ50

4. Estimation of the cost for the above work is difficult since the exact nature of the system is not known. However, a very rough estimate would indicate the overall air conditioning cost (excluding any new exhaust requirements) could run \$60,000 or more. This estimate is based on in-house design and GSA in-house forces completing the work. If further information is required, please contact 

STAT

STAT



10 March 1983

MEMORANDUM FOR: Chief, Headquarters Engineering Branch, LSD

STAT FROM:

[REDACTED]
PP&SS/P&PD

SUBJECT: Renovation Considerations to Headquarters
Room GJ-50

1. I am presently involved in a Staff Study concerning Printing and Photography Division's components in the GJ-56 sector. One of the points of concern is space. I understand that P&PD management has discussed Room GJ-50 (Air Handler Room) with you in the past regarding possible relocation of the air handling unit, or other considerations which would allow P&PD to make better use of this space. I also understand that all consideration on this matter has been verbal; consequently I have nothing in writing to reference in my study.

STAT 2. I have been asked by [REDACTED] (C/P&PD) to request your comments on:

- a. The feasibility of totally removing the air handling equipment to make maximum use of the GJ-50 space, and installing smaller individual air handling units in the affected areas, or
- b. Modifying the current air handling system by installation of new, smaller, more efficient equipment, or
- c. Modifying the current air handling equipment by re-positioning it within the GJ-50 area, thus providing more usable space to P&PD.
- d. Approximate cost estimates on the above (assuming that they could indeed be accomplished).

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Attachment 3-3